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Attorney's Docket No.: 18636-010001

REMARKS

Claims 1-31 and 33-35 are pending in this application, of which claims 1 and 19 are independent. Favorable reconsideration is requested in view of the foregoing amendments and the following remarks.

Interview Summary

On Tuesday, December 13, 2005, Examiner Saba Tsegaye, Examiner John Pezzlo, the applicant's representative Mandy Jubang of Fish & Richardson P.C., and the applicant's representative Manickam Sridhar of Converged Access Inc. conducted a telephone interview. The claim language set forth in claim 1 was discussed. The examiners and the applicant's representatives agreed that additional language related to "controlling a rate of arrival of data packets at the first interface" would clarify the claim and more clearly distinguish the cited references of record.

Specification

The applicant has amended the specification. Withdrawal of the objections to the specification is requested.

35 U.S.C. § 102 Rejections

Claims 1-4, 10, 11, 14-16, 19, 20 and 23 are rejected under 35 U.S.C. § 102(e) as being anticipated by Haddock et al. (US 6,859,438).

Claim 1, as amended, recites a method that includes "controlling a rate of arrival of the data packets at the first interface, the first interface being capable of bi-directional communication, the controlling including sending control information from the device to at least one of a plurality of other devices to effect the rate of arrival; accepting the data packets at the first interface ... and transmitting the accepted packets through the second interface, the second interface being capable of bi-directional communication, the transmitting and the controlling both being in accordance with a policy associated with at least one of the plurality of classes of data flows."

Claim 1 is allowable for a number of independent grounds. First, Haddock does not disclose or suggest "controlling a rate of arrival of the data packets at the first interface, the first

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interface being capable of bi-directional communication, the controlling including sending control information from the device to at least one of a plurality of other devices to effect the rate of arrival." Haddock discloses a "packet forwarding device [that] schedules the packet for transmission from a second port based upon bandwidth parameters corresponding to the traffic group with which the packet is associated." (See Haddock, Abstract, lines 16-19) Specifically, Haddock focuses on controlling packet transmission from a second port by prioritizing data received from the first port. The network manager may control the prioritization of the incoming packet for transmission from a second port (See Haddock, col. 6, lines 41-44), but no component of Haddock controls "a rate of *arrival* of the data packets at the first interface ... capable of bi-directional communication," much less by "sending control information from the device to at least one of a plurality of other devices to effect the rate of arrival." At most, the techniques of Haddock deal only with packets *after* the packets have arrived at the device.

Additionally, Haddock does not disclose or suggest "transmitting the accepted packets through the second interface, ... the transmitting and the controlling both being in accordance with a policy associated with at least one of the plurality of classes of data flows." As Haddock does not contemplate controlling the rate of arrival of packets, it is no surprise that Haddock does not disclose "controlling a rate of arrival of data packets at the first interface, ... and transmitting the accepted packets through the second interface, ... *the transmitting and the controlling both being in accordance with a policy* associated with at least one of the plurality of classes of data flows," as recited in claim 1.

For at least these reasons, claim 1 and its dependents are allowable over Haddock.

Claim 19 recites a device that includes "a rate shaper for controlling a rate of arrival of packets at the first network interface according to the configurable policy, the controlling including sending control information from the device to at least one of a plurality of other devices to effect the rate of arrival; and a scheduler for determining when to dequeue data packets queued in the plurality of queues according to the configurable policy for the classes of data flows." As previously-discussed, no component of Haddock controls the rate of arrival of packets at a first network interface, much less by sending control information from the device to

other devices to effect the rate of arrival. Additionally, Haddock does not disclose techniques in which both the rate of arrival of packets and the dequeuing of packets are performed in accordance to a configurable policy.

For at least these reasons, claim 19 and its dependents are allowable over Haddock.

Claims 1-4, 10, 11, 14-16, 19, 20, 23, 25-27 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols (US 6,608,816) in view of Berthaud et al. (US 6,011,776).

The examiner acknowledges that Nichols fails to disclose "controlling a rate of arrival of packets at the first interface" and points to Berthaud for such teaching, stating,

> Berthaud teaches a source management system that comprises a Leaky Bucket Module. In the Leaky bucket module packets are launched into the network with different priority classes. (Office Action, page 5)

Even so, both Nichols and Berthaud are directed at techniques for controlling the rate at which packets are launched into a network. In Berthaud, the device receives packets from a source, uses a leaky bucket module to designate packets to have one of at least two different priority classes, and launches the packets into the network. (col. 11, lines 40-48). By designating the priority class of the packets prior to launching the packets into the network, the leaky bucket module is able to shape the traffic before it is emitted from the device into the network: "Green packets are guaranteed a pre-specified grade of service based on an acceptable level of delay and loss probability within the network. Red packets do not have the same guarantees and are discarded before the green packets when congestion occurs." (col. 11, lines 48-53). *Berthaud's device does not control the rate of packet arrival; it controls the rate of packet departure.*

Even if the Nichols device and the Berthaud device are arranged in a cascade (or series) arrangement, such that the Berthaud device provides the function of controlling the rate of packets that arrive at the Nichols device, neither device itself controls the rate at which packets arrive at its own interface. The examiner does not address the "in a device" limitation recited in claim 1, and instead provides references that control the rate of arrival of packets at the device through processing wholly outside the device itself.

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For at least these reasons, claim 1 and its dependents are allowable over Nichols in view of Berthaud.

Claim 19 recites a communication device including "a rate shaper for controlling a rate of arrival of packets at the first network interface according to the configurable policy, the controlling including sending control information from the device to at least one of a plurality of other devices to effect the rate of arrival."

It is unclear from the Office Action how the examiner combines the devices of Nichols and Berthaud to form the "communication device" of claim 19. In one instance, the applicant assumes, for the sake of argument only, that the examiner corresponds the Nichols device (130) with the "communication device" of claim 19, and arranges the Berthaud device in series with the Nichols device (i.e., where the Berthaud device is external to the Nichols device). However, such a combination does not result in a communication device that itself includes a rate shaper as recited in claim 19. In another instance, the applicant assumes, for the sake of argument only, that the examiner corresponds the combination device formed by the Berthaud device and the Nichols device (i.e., the Berthaud device and the Nichols device are internal components of a single device) as the "communication device" recited in claim 19. Even so, the Berthaud device controls the rate of arrival of packets at an *internal interface* between the Berthaud device and the Nichols device, whereas the rate shaper of claim 19 controls the "rate of arrival of packets at the first *network interface*" of the communication device.

For at least these reasons, the claim 19 and its dependents are allowable over Nichols in view of Berthaud.

If the examiner is combining the Nichols device and the Berthaud device in a different manner, the applicant respectfully requests that the examiner clearly set forth which elements of claim 19 the examiner finds in each reference and the way in which the examiner is combining the references to disclose the communication device of claim 19.

Claims 5-9, 21, and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols in view of Berthaud et al. as applied to claims 1 and 19 above, and further in view of Epstein et al. (U.S. 6,684,329). The Epstein reference adds no teachings or suggestion to

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Nichols and Berthaud to render claims 1 and 19 obvious and therefore claims 5-9, 21, and 22 are patentable for at least the same reasons as claims 1 or 19 from which they depend.

Claims 5 and 28-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols in view of Berthaud, and further in view of Dillon et al. (U.S. 6,658,463). The Dillon reference adds no teachings or suggestion to Nichols and Berthaud to render claim 1 obvious and therefore claims 5 and 28-30 are patentable for at least the same reasons as claim 1 from which they depend.

Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols in view of Berthaud as applied to claims 1 and 19 above, and further in view of Kloth (U.S. 6,598,034). The Kloth reference adds no teachings or suggestion to Nichols and Berthaud to render claim 1 obvious and therefore claims 12 and 13 are patentable for at least the same reasons as claim 1 from which they depend.

Claims 17, 18, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols in view of Berthaud as applied to claims 1 and 19 above, and further in view of Frey (U.S. 4,245,343). The Frey reference adds no teachings or suggestion to Nichols and Berthaud to render claims 1 and 19 obvious and therefore claims 17, 18 and 24 are patentable for at least the same reasons as claims 1 or 19 from which they depend.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Enclosed is a $50.00 check for excess claim fees and a $225.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

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Respectfully submitted,

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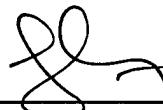
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